only in a normally unoccupied machinery space, paint locker, or space containing flammable liquid stores that has a gross volume of not more than 33.98 cubic meters (1200 cubic feet).

(2) A fixed gas fire extinguishing system that is capable of automatic discharge upon heat detection may be installed only in a normally unoccupied space with a gross volume of not more than 169.92 cubic meters (6000 cubic feet).

(3) A space with a gross volume exceeding 169.92 cubic meters (6000 cubic feet) must be fitted with a manually actuated and alarmed fixed gas fire extinguishing system.

(c) *General requirements.*

(1) A fixed gas fire extinguishing system aboard a vessel must be approved by the Commandant and be custom engineered, unless the system meets the requirements for a pre-engineered fixed gas fire extinguishing system in paragraph (d) of this section.

(2) System components must be listed and labeled by an independent, nationally recognized testing laboratory for the system being installed.

(3) System design and installation must be in accordance with the Manufacturer's Marine Design, Installation, Operation, and Maintenance Manual approved for the system by the Commandant.

(4) A fixed gas fire extinguishing system may protect more than one space. The quantity of extinguishing agent must be at least sufficient for the largest space protected by the system.

(d) *Pre-engineered fixed gas fire extinguishing systems.*

(1) A pre-engineered fixed gas fire extinguishing system must:

(i) Be approved by the Commandant;

(ii) Be capable of manual actuation from outside the space in addition to any automatic actuation devices; and

(iii) Automatically shut down all power ventilation systems serving the protected space and all engines that draw intake air from within the protected space.

(2) A vessel on which a pre-engineered fixed gas fire extinguishing system is installed must have the following equipment at the operating station:

(i) A visual alarm to indicate the discharge of the extinguishing agent;

(ii) An audible alarm to sound upon discharge of the extinguishing agent; and

(iii) A means to reset devices used to automatically shut down ventilation systems and engines as required by paragraph (d)(1)(iii) of this section.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991, as amended by CGD 96–046, 61 FR 57275, Nov. 5, 1996]

§ 28.325 Fire detection systems.

(a) Each accommodation space must be equipped with an independent modular smoke detector or a smoke actuated fire detecting unit installed in accordance with 46 CFR part 76, subpart 76.33.

(b) An independent modular smoke detector must meet UL 217 and be listed as a ''Single Station Smoke Detector—Also suitable for use in Recreational Vehicles.''

§ 28.330 Galley hood and other fire protection equipment.

(a) Each vessel must be fitted with a grease extraction hood complying with UL 710 above each grill, broiler, and deep fat fryer.

(b) Each grease extraction hood must be equipped with a pre-engineered dry or wet chemical fire extinguishing system meeting the applicable sections of NFPA 17 or 17A and must be listed by an independent laboratory.

(c) A vessel 79 feet (24 meters) or more in length must have at least one fire axe located in or adjacent to the operating station.

§ 28.335 Fuel systems.

(a) *Applicability.* Except for the components of an outboard engine or portable bilge pump, each vessel must meet the requirements of this section.

(b) *Portable fuel systems.* Portable fuel systems including portable tanks and related fuel lines and accessories are prohibited except where used for outboard engines or portable bilge pumps. The design, construction, and stowage of portable tanks and related fuel lines and accessories must meet the requirements of ABYC H–25.

(c) *Fuel restrictions.* Except for outboard engines, the use of fuel other than bunker C or diesel is prohibited. An installation using bunker C must